UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ALASKA

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KIMBERLY ALLEN, Personal Representative of the ESTATE Of TODD ALLEN, Individually, on Behalf of the ESTATE OF TODD ALLEN, and on Behalf of the Minor Child PRESLEY GRACE ALLEN,
Plaintiff,

vs. No. 304-CV-0131 (JKS)

UNITED STATES OF AMERICA,
Defendants.
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DEPOSITION OF RONALD F. SHALLAT, M.D.

February 17, 2006

San Francisco, California

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Reported by: DANUTA KRANTZ, CSR NO. 4782

FILE NO.: A000DA7

Q. So aside from articles that Mr. Guarino sent to you, you didn't do any review of the literature yourself; is that correct?
A. No. That's correct.
Q. I am just curious, why did you -- in terms of the depositions of people involved in this case, you reviewed Donna Fearey, Mrs. Allen and Patricia Ambrose.
Did Mr. Guarino ask you specifically to review those particular depositions?
A. No. I just thought that would be a good idea.
Q. And why those particular ones as opposed to, like, Dr. Dietz or Dr. Lee or --
A. Well, I think that those other doctors were involved after the fact, and I assume the areas in dispute will be involving the depositions of the people that I reviewed, you know. That's all. Just that was the way I reasoned it out.
Q. In terms of other materials that you were given by Mr. Guarino, were you given all of Mr. -- as far as you knew, all of Mr. Allen's medical records?
A. As far as I know.

Q. Were you given any of his employment records?
A. I don't know. If they were in there, I didn't look at them.
Q. You don't recall seeing any employment records?
A. No.
Q. Did you review the actual CT, the brain CT scans from Providence Hospital that were taken on April 19, 2003?
A. Yes.
Q. Let me ask you about your current practice. And you and I spoke, I think it was maybe two or three years ago; is that correct?
A. That's right.
Q. What -- currently, are you still semi -- would semi-retirement be the --
A. Semi-retired would be --
Q. -- a good way to describe -- description?
A. -- the appropriate term, right. I am working just two days a week at UC Med Center in San Francisco.
Q. What are you doing at the med center?

A. I am teaching. I help other attending neurosurgeons there deal with the residents. I see patients with the residents, I review cases with them. I occasionally assist in surgery.
Q. When you say you occasionally assist in surgery, are you assisting the residents or the attendings or --
A. Either.
Q. How many patients are you seeing a week at U.C. Med Center? I'm sorry, U.S. Med Center.
A. About probably ten.
Q. All right. And is this any particular department of the -- I mean, is this in the neurosurgery department?
A. It is in the neurosurgery department.
Q. Do they have any particular -- is there sort of a subdepartment there that deals with, let's say, since it's the subject of this case, aneurysms?
A. Yes, but I don't usually work with that department.
Q. That is a separate department; is

that correct?
A. Well, it's a division, if you will, or a subspecialty of neurosurgery. That's right.
Q. Would it be fair to say that is not your subspecialty?
A. That's correct.
Q. What is that subspecialty called?
A. Vascular neurosurgery.
Q. And is your particular interest or has -- let me back up.
You have been a neurosurgeon for 40 years; is that correct?
A. That's correct.
Q. Has your particular interest been in pediatric neurosurgery?
A. That -- when I was in practice, that made up half of my practice.
Q. What was the other half of your practice?
A. Adult, general adult neuro -- everything.
Q. General everything that came in the door?
A. Right.
Q. The -- and I understand you are

A. Well, you want to try to make a definitive diagnosis as to the cause of the subarachnoid hemorrhage. 11:31:26 11:31:30 11:31:33

Q. Would you do that through angiography? 11:31:34 11:31:35

A. That is the gold standard. Nowadays, they are getting closer to relying on a test called CT angiography, but -- 11:31:36 11:31:39 11:31:43

Q. And I do want to sort of go back to 2003, what you think the technology that was available at that point? 11:31:48 11:31:52 11:31:57

A. Well, they had CT angiography, but I am not sure it was the gold standard. The gold standard would still be transfemoral cerebral angiography. 11:31:58 11:32:01 11:32:03 11:32:07

Q. When you say the gold standard -- 11:32:08

A. Meaning the best available, the most likely to make the clearest and most definitive diagnosis. 11:32:09 11:32:13 11:32:17

Q. Okay. What else would that tell you? What would the angiography tell you? 11:32:19 11:32:21

A. It would tell you if you already had vasospasm. 11:32:23 11:32:25

Q. What else would it tell you? 11:32:29

A. Well, it tells you about collateral 11:32:31

circulation, which may be important in designing a treatment plan. 11:32:37 11:32:43

Q. Is art -- if you could help me out. Arteriography, is that -- is angiography the same as arteriography? 11:32:44 11:32:49 11:32:52

A. Yes. 11:32:52

Q. They are sort of synonymous? 11:32:53

A. Yeah. Technically, angiography means the study of blood vessels, whereas arteriography means the study of arteries, but you end up studying them both. 11:32:55 11:32:58 11:33:02 11:33:06

Q. How long does it take to get -- I am just curious in your own practice, how long would it take you to get an angiography if you wanted one? 11:33:08 11:33:10 11:33:12 11:33:15

A. Depended on the time of day. If a patient came in at 10:00 at night, you would have to call in the team to do angiography. And in those cases, if they would assure you that they would do it first thing in the morning, you might set it up for first thing in the morning rather than bringing them in at midnight to do it, in other words. 11:33:16 11:33:22 11:33:28 11:33:32 11:33:35 11:33:37 11:33:40

If it happened during the day, then it depended on what else they were doing and whether 11:33:43 11:33:45

you would have to bump somebody who was scheduled for an angiogram for some elective procedure or what have you, you know. 11:33:48 11:33:51 11:33:54

So it could take a minimum of an hour to get it done and it could take several hours to get it done. 11:33:56 11:34:00 11:34:03

Q. How -- 11:34:04

A. By "done" I mean to get the patient to the suite. Then it takes more time, you know. 11:34:04 11:34:08

Q. How long does it take to do an angiography? 11:34:10 11:34:13

A. It could take anywhere from one to two or three hours, I think. It depends on the skill of the angiographer, the type of equipment they have, the help they have and so forth. 11:34:13 11:34:17 11:34:20 11:34:23

Q. Then we have talked -- you have talked a little bit about surgery, that that is a potential treatment for aneurysm; is that correct? 11:34:28 11:34:34 11:34:37

A. That's correct. 11:34:41

Q. And what -- if you could just describe for me what are the kind of -- in 2003 what were the possible surgeries? 11:34:41 11:34:44 11:34:47

A. Well, if we assume that the problem is an aneurysm as a cause of subarachnoid hemorrhage -- 11:34:50 11:34:53

Q. Let's assume that for a moment.

A. Right. Surgery would consist of a craniotomy, meaning an opening in the head, and approaching the aneurysm under the microscope, the ultimate goal is usually to try to put a metal clip on the aneurysm, on the neck of the aneurysm to exclude it from the circulation without compromising the parent vessel. 11:35:00 11:35:02 11:35:06 11:35:13 11:35:17 11:35:20 11:35:24

Q. Is it more -- is there a typical location -- I mean, statistically, is there a more typical location of the aneurysms that cause subarachnoid hemorrhages? 11:35:29 11:35:32 11:35:34 11:35:38

A. Well, most aneurysms occur on what is called the circle of Willis, at the base of the brain. I am not sure of the exact percentage, but probably somewhere in the neighborhood of 80 percent occur on the so-called anterior part of the circle of Willis and 20 percent on the posterior part, roughly. 11:35:38 11:35:41 11:35:44 11:35:48 11:35:51 11:35:54 11:35:55

Q. What are the consequences of that location in terms of having, you know, being able to have surgery or -- 11:35:57 11:36:00 11:36:03

A. Right. Well, the aneurysms of the posterior part of the circle of Willis are technically more difficult. 11:36:05 11:36:10 11:36:11

Q. So the anterior being less difficult?
A. That's right, but still technically challenging. I mean, it's a -- it was probably the most hazardous kind of surgery that I did in neurosurgery, I mean, the highest risk and some of the most technically challenging surgery.
Q. So really, it would be -- you know, in an ideal world you would really want a patient who is being treated at a center where really the focus was on aneurysms and doing that type of surgery; would that be fair to say?
A. I think the patient has, you know, a much better chance of a good outcome.
Q. So a much better chance of a good outcome if they are in a facility which actually really specializes in that particular type of surgery?
A. Exactly.
Q. Would you agree with me that it's actually unusual that surgery would occur within the first 24 hours of a patient having a subarachnoid hemorrhage bleed?
A. Well, I think it's unusual only in the sense that the logistics sometimes are hard to

arrange in 24 hours between getting the angiogram and then assembling an experienced and well-rested team to do it, you know. Again, most surgeons would not want to tackle this at 10:00 at night with a relief crew of nurses in the operating room and so forth, and so very often they are put off for 24, 48, 72 hours, just to make the logistics optimal.
Q. Sure. But statistically, I mean, that is -- would you agree that statistically that is true, most surgeries take place more than 24 hours after the patient presents with a bleed?
A. Probably so.
Q. Okay. Let me ask you about the report, which I know I have. I have two copies of it.
(Document marked Plaintiff's Exhibit 2 for identification.)
MS. McCREADY: Q. What exactly were you asked to do in this case?
A. I don't remember the exact charge. I guess just to render an opinion about the whole case, you know, in some capacity, but I don't remember what the exact charge was.
Q. As you sit here today, what is your

understanding of what your role is in this case?
A. I think that my role is to comment on the care of this patient and the course, in his subsequent clinical course, and the actions involved in and around his case.
Q. When you say comment on the care -- and let me just explain. The reason why I want to -- I want to understand exactly what the expectation of your testimony is going to be at trial because it could affect the length of this deposition.
A. Okay.
Q. I hope you understand.
So when you say comment on the care, what do you mean?
A. Well, as I told you earlier, I am not here to comment on whether the nurse practitioner met the standard of care. It's not my role and it's not my expertise to do so.
Q. All right. Again, the same thing is for the triage nurse?
A. Correct.
Q. So your comment or opinions would be, then, about his course or his likely course?
A. I would say that is probably a good

characterization of it.
Q. Okay.
MR. GUARINO: Just so it is clear, you have got his report. You can expect he would testify about anything in terms of the statements that are made in his report.
MS. McCREADY: Okay.
MR. GUARINO: You keep raising in terms of standard of care and in terms of whether he is going to be asked to comment on standard of care. That is a legal term. I mean, to explain the concept of subarachnoid hemorrhage does not mean you are going to comment on the standard of care about something.
MS. McCREADY: Let's make sure we understand this.
In your -- is it your idea, Gary, that you can call an expert witness, you can just sort of comment on the care provided, so Dr. Shallat could comment that he thinks, well, gee, you know, it was perfectly reasonable for the nurse practitioner to have misdiagnosed this patient, but he is not going to talk about the standard of care? That doesn't make any sense to me.
MR. GUARINO: If that's the point of

question, I don't know, but he can certainly testify about whether subarachnoid hemorrhage is a difficult condition to diagnose. Why is that? It has nothing to do with whether a nurse practitioner should or should not on that particular occasion diagnose it. It just explains to a fact finder why it's a difficult condition to diagnose. That's not a standard of care question.
But we can talk all day about that. That is not the point of the deposition. You should question him about what is in the report.
MS. McCREADY: Yeah, I will.
MR. GUARINO: Yeah, I am sure you will. But am I going to ask him, did Nurse Fearey breach the standard of care? He just told you no, that is not what he is going to be asked about.
MS. McCREADY: Right. But there are other ways. Certainly I would -- there are other ways of commenting on care that you don't use the talismanic phrase "standard of care," but it's still the same thing. That's all. But that's all right.
MR. GUARINO: And then he may not understand all of those other ways. So you have asked the question, he answered it. If that

shortens your questioning today, great, but, you know, you have got his report. You can assume anything in his report, he could testify about.
MS. McCREADY: That's fine. We will move on.
Q. I have your report. We have marked it as Exhibit 2. Do you have that in front of you, Dr. Shallat?
A. Yes.
Q. Okay. Certainly you have the opinion that Mr. Allen had a subarachnoid hemorrhage bleed; is that correct?
A. That's correct.
Q. All right. And that -- was that based on the CT scan that was taken at Providence on April 19, 2003?
A. Yes.
Q. Anything else that you relied on in determining that he had a subarachnoid bleed that day?
A. No.
Q. You said, "Probably the most common" -- and I am reading from your report. "Probably the most common cause of this condition other than trauma in a young person is that of

cerebral aneurysm."
And that is correct, isn't it, that statistically, most people with subarachnoid bleeds such as this, the cause would be a cerebral aneurysm?
A. I believe that is true.
Q. Is it your opinion that it's more likely than not that Mr. Allen had a subarachnoid -- I'm sorry, that he had a cerebral aneurysm?
A. I believe that statistically that would be the best likelihood, yes.
Q. Sure. And it was like more than 50 percent chance that he had a cerebral aneurysm; is that right?
A. I believe that is correct.
Q. Now, it says, "Certain categories of drugs, such as cocaine and amphetamines, can induce this type of bleeding."
Now, there is not any evidence in all the records you have reviewed, and you reviewed a lot of medical records; is that right?
A. That's right.
Q. There is not any evidence that Mr. Allen was using cocaine or amphetamines; is

that right?
A. That's correct.
Q. All right. And so again, statistically, most likely he had an aneurysm; is that right?
A. That's right.
Q. Now, you go on to say that the diagnosis of subarachnoid hemorrhage is often overlooked on initial presentation. And that is correct, isn't it?
A. Yes, it is.
Q. And as we just discussed, I mean, that has been talked about in the literature for over 30 years; is that right?
A. That's right.
Q. And there is a problem where -- there is a concern expressed generally in the literature, that, gee, you know, patients with subarachnoid hemorrhages, it's important that practitioners who are in emergency departments actually, you know, learn how to do the differential diagnosis and diagnose subarachnoid hemorrhages earlier.
I mean, is that a general concern that ER physicians, medical practitioners are missing

thing? 11:53:22
MR. GUARINO: Objection, foundation, 11:53:22
because I think it's very careful in the questions 11:53:23
whether you are asking about headache or pain in 11:53:25
the head, because that is an ambiguous term in 11:53:31
this case. 11:53:31
MS. McCREADY: No, it is not an 11:53:31
ambiguous term. I think the doctor understands 11:53:33
what I mean, and I can ask my questions. 11:53:33
MR. GUARINO: That is my objection. 11:53:33
THE WITNESS: Well, it's always 11:53:35
important in medicine to take a history that is 11:53:39
accurate and careful. 11:53:42
MS. McCREADY: Q. Well, there is a 11:53:47
difference between accurate and detailed; would 11:53:47
you agree? 11:53:52
A. Yes. 11:53:57
Q. You can get accurate information 11:53:57
and ask one question; is that correct? 11:53:59
A. Right. Okay. I guess I will go 11:54:00
along with that. 11:54:02
Q. Would it be important, then, to 11:54:03
get -- to take a -- well, of course, it depends on 11:54:04
what you are trying to ferret out from the 11:54:07
patient, but it would be important, at least if 11:54:10

you have got a patient who presents with a severe 11:54:11
pain in their head, reporting severe pain in their 11:54:14
head, that you would want to get a history as to 11:54:17
understanding location of the pain; would you 11:54:19
agree with that? 11:54:21
A. Well, you already just said where 11:54:22
the location was, in the head. But if the patient 11:54:24
says the pain is in the ear, then that is -- it 11:54:26
connotes a different concept, you know. 11:54:28
So you are listening to the patient when 11:54:31
you take a history. You are reacting to what they 11:54:34
tell you, you know. You can't go in there with a 11:54:37
prejudice and say, I think this guy has a headache 11:54:41
or I think he has an earache. You have to listen 11:54:44
to the patient and what they say and then go from 11:54:46
there. 11:54:48
Q. Exactly. You have to listen to the 11:54:49
patient, and then as a medical provider, 11:54:50
especially in an emergency department, it would 11:54:53
also be your job to actually ask questions to 11:54:57
glean certain information so you can make a 11:55:00
differential diagnosis; would that be right? 11:55:01
A. Sure. 11:55:03
Q. And certainly you have to listen to 11:55:04
the patient. That would be probably the most 11:55:05

important thing. 11:55:07
A. Right. 11:55:07
Q. But in that setting, where you are, 11:55:08
you know, a patient is reporting severe pain in 11:55:13
the head, would you -- you would want to know the 11:55:17
location, but would you want to know the location 11:55:19
where in the head? 11:55:22
A. Well, sometimes that is important, 11:55:23
but most of the time, if it's head, meaning, you 11:55:28
know, up here on the calvarium, on the -- whether 11:55:34
it's frontal or occipital may not make a 11:55:37
difference. Sometimes it makes a difference if 11:55:41
the headache is unilateral versus bilateral. 11:55:43
It makes a big difference if you are 11:55:46
talking about headache versus pain, pain, such as 11:55:49
ear pain, nose pain, eye pain, cheek pain, you 11:55:57
know. I mean, so again, it's important to get an 11:56:00
accurate and detailed description by the patient 11:56:06
of the location of the pain, yes. 11:56:09
Q. How about the onset of the pain, 11:56:11
would that be something you would want to know? 11:56:16
A. Yes. 11:56:18
Q. And whether or not there were 11:56:18
associated symptoms with that pain, would that be 11:56:22
something you would want to know? 11:56:25

A. Sure. 11:56:26
Q. How about the history, whether or 11:56:26
not it was pain that was like, you know, the pain 11:56:29
the patient had had in the past? 11:56:31
A. Very important. 11:56:33
Q. Would it be important to know 11:56:34
the -- when the intensity of the pain peaked or, 11:56:38
you know, the natural history of the pain? Does 11:56:42
that matter? 11:56:44
A. Sure, it's all important in helping 11:56:44
to come to a conclusion. Yes. 11:56:48
Q. Going to the -- back to your 11:56:50
report, that next paragraph, the fourth paragraph 11:56:57
down, it says, "The diagnosis was especially 11:57:01
difficult in Mr. Allen's case, since he had a long 11:57:03
history of headache and/or facial pain. He was 11:57:05
followed and treated for this condition, which was 11:57:11
posttraumatic, by a pain clinic which dispensed 11:57:12
and controlled his narcotic analgesic medicine." 11:57:14
And I want to focus on the first 11:57:17
sentence. When you say a long history of headache 11:57:18
pain, what is that based on? 11:57:21
A. The medical records. 11:57:23
Q. What medical records specifically 11:57:25
are you basing that on? 11:57:28

A. Well, I saw it referred to several times in his medical records that he complained of headache, and that it was either associated with or emanated from the ear and jaw, but it specifically used the term "headache" in some of his medical records. 11:57:29 11:57:31 11:57:33 11:57:39 11:57:46 11:57:49

Q. It's important to me to know which those records are. 11:57:50 11:57:56

A. Well, I couldn't tell you. I would have to go back and look at them one by one. And I didn't write it down and say this is on page three or what. But I remember specifically, I think in one instance in the physical therapy paper and in one instance in the pain contract paper that I think that was referred to. If you want me to look at those papers now, I might be able to find it. 11:57:56 11:57:58 11:58:00 11:58:03 11:58:10 11:58:13 11:58:17 11:58:20 11:58:23

Q. When we go on a break, I will ask you to look for those. 11:58:24 11:58:26

A. Okay. 11:58:27

Q. That raises another question. 11:58:28

Did you do a chronology in this case in terms of any sort of chronology of what was going on with Mr. Allen, either before the 19th of April '03 or in taking notes? 11:58:30 11:58:32 11:58:35 11:58:39

A. I looked at some of his, you know, his previous medical records from the time of his accident and his reconstructive surgery and the pain contract. 11:58:41 11:58:43 11:58:47 11:58:50

Q. But did you yourself take any notes and make yourself a chronology? 11:58:52 11:58:54

A. No. 11:58:56

Q. Did you make -- did you take any notes -- and maybe you just answered this, but I want to be clear. 11:58:56 11:58:59 11:59:00

Did you take any notes and write down what visits or when he referred to having headaches? 11:59:01 11:59:04 11:59:07

A. No. 11:59:09

Q. Did Mr. Guarino supply you with any sort of medical chronology? 11:59:09 11:59:12

A. He supplied me with the medical records, but not -- 11:59:14 11:59:18

Q. I am asking specifically about like a chronology? 11:59:18 11:59:20

A. No, he did not. 11:59:21

Q. Did you take any handwritten notes on this case? 11:59:22 11:59:24

A. I wrote out this report by hand before I typed it on the computer, but that -- 11:59:24 11:59:27

then I threw that away. So that is the only thing. 11:59:30 11:59:33

Q. I was going to ask you -- 11:59:33

A. I don't have any other handwritten notes. 11:59:36 11:59:38

Q. You prepared this report? You wrote it out; is that right? 11:59:38 11:59:40

A. I wrote it out, typed it and threw it away. 11:59:41 11:59:43

Q. So no other handwritten notes? 11:59:44

A. No. 11:59:46

Q. How important is it that Mr. Allen has -- how important is it to your opinion that the diagnosis was difficult in this case that this issue that Mr. Allen had a long history of headache pain? 11:59:46 11:59:53 11:59:55 12:00:00 12:00:02

A. I think it's very important. 12:00:03

Q. Why is that? 12:00:07

A. Because if he presents in the emergency room with symptoms that he has been having on and off for two years, it makes your level of concern about subarachnoid hemorrhage less than concern about his usual problem. 12:00:08 12:00:14 12:00:17 12:00:24 12:00:28

Q. Did you note at all when he previously had come to the -- presented at the 12:00:33 12:00:37

emergency department of Alaska Native Medical Center complaining of 10 out of 10 pain in his head? 12:00:40 12:00:44 12:00:47

A. I don't remember. I can't tell you the date or the actual record that I saw. 12:00:47 12:00:49

Q. Can you tell me whether or not you ever saw on this gentleman's medical record where he presented to the emergency department, any emergency department, complaining of 10 out of 10 pain in his head, and also reporting vomiting and nausea and unable to keep his pain medications down? 12:00:53 12:00:54 12:00:57 12:00:59 12:01:01 12:01:05 12:01:09

A. No. 12:01:09

Q. No, you don't remember or, no, you don't think you ever saw that? 12:01:09 12:01:12

A. I don't think I recall seeing that. 12:01:13

Q. Do you know whether or not, as you sit here, whether or not when the last time Mr. Allen had even presented to the emergency department at Alaska Native Medical Center prior to April 13, 2003? 12:01:15 12:01:18 12:01:21 12:01:25 12:01:28

A. I don't remember. 12:01:29

Q. Can you tell me whether or not he ever presented to any medical facility ever in the medical records you reviewed complaining of pain 12:01:31 12:01:32 12:01:35

A. It certainly sounds like it. He walked in. He was alert and he appropriately answered questions appropriately. So it sounds like he didn't have any neurological definite. That's right.

Q. When you say, "his symptoms did not significantly differ from his chronic complaints," what is that based on?

A. Well, when he signed in to the emergency room, I think that was the case where I saw his notation that said his chief complaint was right ear pain or ear pain.

And he went on to tell them that he was worried about an ear infection and that he typically got these symptoms when he would go over mountains and/or a mountain pass, and that -- as I understand it, he relayed that past history to the people in the urgent care.

Q. I am going to mark as Exhibit 3 that emergency visit record from April 19.

(Document marked Plaintiff's Exhibit 3 for identification.)

MR. GUARINO: That first packet of things that I gave you, did that not get marked, the letters that --

MS. McCREADY: I didn't mark those yet.

MR. GUARINO: Okay. All right. I thought you had. All right.

MS. McCREADY: But thank you for reminding me.

Q. Dr. Shallat, I just handed you what has been marked as Exhibit 3.

Is this the record that you were referring to?

A. Yes.

Q. So this is the emergency visit record from April 19, 2003; is that correct?

A. Correct.

Q. And so, your opinion that his symptoms did not significantly differ from his chronic complaints is based on this; is that right?

A. Well, and the subsequent -- the testimony or depositions of the triage nurse and a the nurse practitioner in the urgent care clinic.

Q. So the triage nurse, Ms. Ambrose, and Donna Fearey; is that right?

A. That's correct.

Q. Did you also review the deposition testimony of Dr. Dietz or Dr. Lee?

A. I did.

Q. Was that sometime ago?

A. Yes.

Q. Do you remember who Dr. Dietz and Dr. Lee are?

A. Was Dr. Lee an internal medicine doctor who --

Q. Yes.

A. -- admitted him when he came into the hospital comatose? I don't remember Dr. Dietz. Tell me about him, if you would.

Q. Okay. Dr. Dietz is the emergency room physician who admitted Mr. -- does that sound familiar?

A. Yes.

MS. McCREADY: I am going to mark as Exhibit 4 a Providence Alaska Medical Center record, date of service, April 19, '03, with Susan Dietz's his name on the bottom of it.

Sorry, Gary. I know I have got another copy. Oh, here we are.

(Document marked Plaintiff's Exhibit 4 for Identification.)

MS. McCREADY: Q. Do you remember reviewing this record?

A. Yes.

Q. Is it your understanding that Dr. Dietz, as we just discussed, is the emergency room physician that admitted Todd Allen to Providence Alaska Medical Center on the afternoon of the 19th?

A. Yes.

Q. So you have reviewed this record before?

A. That's correct.

Q. So did you -- I want to ask you about where Dr. Dietz discusses the history of the present illness, and specifically -- and I am going to read from her record. "The history obtained over the course of his resuscitation indicates that this gentleman was visiting from Valdez, therefore, staying in a hotel while he was doing shopping for his new home in Valdez. He apparently developed a severe headache earlier in the morning. His wife states he has a history of some episodes of chronic pain from a facial reconstruction from a significant motor vehicle accident one year ago, when he had to have some titanium plates placed in his face and jaw."

Now, Dr. Dietz had the idea that

wife, who was present that morning, and that very same day, has a -- describes her husband as having a severe headache and had pain going up the back of his head to the top of his head?

A. No, I can't. I mean, I can't put myself in her shoes. I don't know. But why would two medical personnel who are trained to take histories accurately and -- why would they indicate it differently than what the wife's recollection is later on? They document it. They wrote it down presumably the same day. And they are trained to take histories.

There is no reason for them to fudge it and say, Oh, no, I am going to make it sound like it's ear and jaw and then head versus just headache. I mean, I don't -- there would be no reason for them to skew it in that direction.

Q. But given -- well, Donna -- you know the training of Donna Fearey. She is not a medical doctor. You understand that; is that correct?

A. I understand.

Q. Given what we know about what happened with this gentleman, that he subsequently died of a subarachnoid bleed, do you think that --

Mr. Allen actually had an aneurysm, what do you mean?

A. Just what I said. The only -- there is no proof. There is speculation based on statistics, and I would agree with the statistics. I already said that I think it is more likely than not that he did have an aneurysm.

Q. And there is no proof because we don't -- there was no CT taken and he was not worked up for having a subarachnoid bleed that morning, so we don't have the data that; is correct?

A. That's correct.

Q. And that it's "pure speculation that his outcome could have been altered if the correct diagnosis had been made in a timely manner and appropriate treatment instituted"?

If you could explain that. Why is that pure speculation?

A. Well, I think I explained it more with this -- the subsequent, you know, things.

Q. Sure. Please do.

A. And I think it has to do with the time line of his whole clinical course. I think that is my point, that I think it would have been

do you have any opinion as to whether or not it's more likely than not that he had severe head pain going up the back of his head to the top of his head that morning?

A. I have no way of knowing that. I just have to go by what is written down there.

Q. I am going to go to the next paragraph of your report.

MR. GUARINO: Is that Exhibit 2 now, just for --

MS. McCREADY: Yes, it is. Thank you.

Q. It says, "Since there was no proof that Mr." --

MR. GUARINO: Excuse me. I am just trying to find my place. Hold on a second.

MS. McCREADY: Q. "Since there was no proof" -- and I am reading from your report -- "that Mr. Allen actually had any aneurysm, it is pure speculation his outcome could have been altered if the correct diagnosis was made in a timely manner and appropriate treatment instituted."

I have a couple of questions about that sentence.

When you say there is no proof that

very difficult to have a good outcome in his case, even if the correct diagnosis were made that morning based on what I say here.

Q. I mean, it's true, isn't it, that this gentleman was discharged after given a shot of Phenergan; is that right?

A. That's right.

Q. He was sent to do whatever he was going to do; is that right?

A. Mm-hmm.

Q. He went to -- and according -- you know, you have read the wife's deposition; is that right?

A. Yes.

Q. And they went Sam's Club and they walked around; is that true?

A. They first went to breakfast. He ate a large breakfast, she said.

Q. Is that something that is of consequence to you or is that --

A. Again, in my mind, that is not the picture of someone who has had a major bleed at that point in time. You know, he is too well to have had a major bleed. He probably, more likely than not, as you have got me to say, that he had a

Q. But not only did he not get treatment, wasn't it -- he was not even told not to lift anything. I mean, he went -- let me strike that. Let me ask a question.
Wasn't it really worse than not getting medical treatment for Mr. Allen in that he went on to do certain activities that, in fact, could have made his condition worse?
MR. GUARINO: Object to foundation.
THE WITNESS: Well, you know, I guess if he went to the gym and started weight-lifting, that would have been bad, but I mean, to -- since the diagnosis was not made, I don't know that there was any reason for them to give him any special precautions. And, in fact, it sound like he didn't do much.
I mean, he laid down on a swing at Sam's Club while she was shopping, and when they got back to the hotel he laid down. He might have brought some packages in, but I don't know how much they weighed or how much, you know, exertion he did. But it sounds like he didn't do much.
But I mean, you can always use hindsight and say, gee, if we had known his diagnosis, we should have told him not to do this or that, but

we didn't -- they didn't know, so I can't fault them for not saying don't do this or that.
MS. McCREADY: Q. And I'm sorry, my question probably was not very clear, because I didn't mean criticize -- I didn't mean to ask you to criticize or not criticize the staff at Alaska Native Medical Center because they didn't give him precautions when he left.
But my question really is, not only did Mr. Allen -- you would agree with me that Mr. Allen certainly didn't get any medical treatment when he left Alaska Native Medical Center that morning.
A. Okay. Other than the Phenergan.
Q. Other than the Phenergan.
A. Okay.
Q. But he did things -- I mean, lifting things certainly would not be something you would recommend to a patient with a subarachnoid hemorrhage to do; wouldn't that be fair?
A. That's correct.
Q. Would you recommend to a patient with a subarachnoid hemorrhage that they lay down and go to sleep without any monitoring?

A. No.
Q. So not only was he not treated, he was doing things that could have been contraindicated for his condition; is that fair to say?
A. That is fair to say.
Q. So isn't it speculation that he would have had a poor prognosis regardless of treatment?
A. I still think -- yes, I still think his prognosis was very poor, because, as I said, even if the diagnosis had been made, the time line of how quickly he could have been worked up and/or treated was such that I think he -- by the time the diagnosis was made, the definitive one with an angiogram, was about the time he probably started deteriorating. And, you know, I am not sure that anything that anybody could have done could have turned that around.
Q. Doctor, let me ask you, isn't one of the purposes of when you are monitoring a patient who has got a subarachnoid bleed, before you do an angiogram or before you do surgery or before you do any sort of further testing, isn't one of the reasons to monitor the patient so that

you can prevent them from deteriorating?
MR. GUARINO: Object to the foundation.
THE WITNESS: Well, I will try to answer that. Let's say he was being monitored. Let's say he was in the hospital being monitored, and then at 1:00 in afternoon they say, Okay, we are ready for you, Mr. Allen, for your angiogram. And they take him down and sedate him to do the angiogram.
And during the course of the angiogram, you know, because that is about the time that he started going down the hill. There is not much you could do, I mean, you know. So it didn't matter. I am presenting a hypothetical case, as you are, too.
MS. McCREADY: Q. Sure. But we only have hypotheticals because we have got a lack of data in this case; isn't that right?
A. Yeah. But I mean, I am saying that, you know, he started going downhill very rapidly about the time that, my understanding of the logistics and the time line of how he could have been worked up and treated, you know, and he certainly -- I don't think that they could have gotten him in good enough shape to ship him down

to Seattle based on what I know of when he went downhill and how long it would have taken them to get him worked up and then shipped out.

Now, if they didn't take the time to do the angiogram and just said, Hey, we have got a guy that we really think has a subarachnoid hemorrhage. We are going to ship you down right now; and I don't know how long that would have taken to get the helicopter and get him to Seattle, but that might have been a better scenario than admitting him, working him up, doing the angiogram there, and then deciding where he should go.

But I still think, you know, it was a case that would have been very difficult to have a good outcome no matter what.

Q. I guess I want to ask about your opinion about that.

Do you think it's more likely than not that regardless of the treatment he would have had the same outcome? And more likely than not meaning, you know, is it more than 50 percent likely that he would have had the same outcome regardless of treatment?

A. Yes.

Q. You reviewed the CAT scan from Providence; is that right?

A. Yes.

Q. Tell me what you gleaned from that CAT scan.

A. Well, the first thing that I gleaned was the absence of two conditions that could have helped him a lot if he had them and they were dealt with, and the local neurosurgeons could have dealt with that. And that is, one is a clot, intercerebral hemorrhage. And if that was a large clot and causing mass effect on the brain, they could have gone in and evacuated that clot and got him in much better shape for subsequent treatment of the aneurysm.

The second condition that he could have had on that CAT scan, but he didn't, was hydrocephalus, enlarged ventricles to the blood obstructing the flow or absorption of spinal fluid. And they could have put in a ventricular drain, an external ventricular drain, or EVD, that, again, could have made him better to the point where then they could have either dealt with the aneurysm or shipped him out or what have you.

He didn't have either of those

conditions. Those are the two things that you look for in someone who is very severely impaired as he was at the time he had that CAT scan, in the hopes that you can deal with that and make him better.

He did have subarachnoid hemorrhage, for sure, and he had cerebral edema or brain swelling.

Q. Let me ask you about the -- do we know whether or not he had either of those two conditions, the hydrocephalus or a blood clot, earlier in the day?

A. No. They have would have showed up on the CAT scan.

Q. They would have showed up on the CAT scan --

A. Oh, yeah.

Q. -- in the afternoon?

And when -- and the CAT scan was taken after he was -- went into respiratory arrest and was taken to the hospital; is that right?

A. Right.

Q. And then, so he certainly had subarachnoid --

A. Hemorrhage.

Q. -- hemorrhage?

A. Mm-hmm.

Q. And then he had brain swelling?

A. Right.

Q. And then did Mr. --

A. And he probably also had signs of ischemia to the brain.

Q. Did you see that he had signs of ischemia to the brain?

A. Yeah, because the distinction between the gray matter and the white matter was indistinct or blurred, and that is usually an indication that there has been some ischemic change to the brain.

Q. Let me ask you to explain that.

What are the signs -- I mean, what is ischemia, and then how does that relate to gray and white matter being --

A. Well, ischemia means that there is lack or insufficient blood supply to the brain. And when you have that it causes damage to the brain, and that can be visualized or imaged on the CAT scan by blurring of the gray-white junction, the -- where the gray matter and the white matter meet should be clearly demarcated, and when you see it kind of blend together, as it is in this

improved his condition; is that correct? 13:26:37
A. Correct. 13:26:38
Q. It's not that, you know, had he had 13:26:38
a subarachnoid bleed -- if you have got somebody 13:26:42
who has -- strike all that.
If you have a patient with a 13:26:46
subarachnoid bleed and they present to a medical 13:26:47
facility and they are actually neurologically 13:26:50
intact, that is not necessarily going to make a 13:26:52
big difference whether they have hydrocephalus or 13:26:55
a clot; is that right? 13:26:58
A. That's correct. 13:26:58
Q. So when you state the opinion that 13:26:59
Mr. Allen's CT scan showed neither of these 13:27:06
conditions, that is, the hydrocephalus or this 13:27:09
clotting issue, which in my opinion means that his 13:27:10
prognosis was very poor, regardless of when or 13:27:13
where or what kind of treatment was instituted, 13:27:16
that is based on the fact that he -- at the point 13:27:18
where they took the CT scan, he was in such bad 13:27:22
shape; is that right? 13:27:26
A. That's correct. 13:27:26
Q. I am going to jump down toward the 13:27:28
end of your report, because I think we have spoken 13:27:38
quite a bit about that -- the one paragraph I am 13:27:43

going to skip over for now. 13:27:46
It says, "In general, aneurysms are 13:27:47
ideally treated within 72 hours of the initial 13:27:49
bleed." 13:27:52
And why is that? 13:27:52
A. Well, a couple of reasons. One is 13:27:56
the sooner you deal with them, the sooner you 13:28:04
eliminate the possibility of rebleeding. The 13:28:09
second reason is that the peak incidence of 13:28:12
vasospasm is probably between three and ten days 13:28:17
post bleed. 13:28:22
Q. Could you tell by looking at 13:28:24
Mr. Allen's CAT scan on the 19th whether or not he 13:28:26
had suffered a vasospasm? 13:28:30
A. Can't tell from CAT scan. 13:28:31
Q. Can you tell by looking at his CAT 13:28:33
scan whether or not that is a rebleed? 13:28:37
A. No. 13:28:38
Q. Do you have an opinion about 13:28:39
whether or not he rebled that day? 13:28:40
A. I think it's more likely than not 13:28:42
that he had the sentinel bleed the night before or 13:28:48
early that morning, and that he rebled sometime 13:28:52
when he was in his hotel room that afternoon. 13:28:57
Q. Why do you -- I'm just curious. 13:29:01

What is that based on? I want to know everything 13:29:03
that you are looking at to come to that opinion. 13:29:07
A. Well, to me it's the best 13:29:08
explanation of why he went downhill so quickly. 13:29:12
As I said earlier, if we accept the fact that he 13:29:18
probably had a sentinel bleed in the morning, you 13:29:25
usually don't go downhill that rapidly from a 13:29:29
small sentinel bleed. You usually don't develop 13:29:32
severe brain swelling, ischemia, vasospasm, 13:29:35
et cetera. 13:29:39
And so, the way I put this together is 13:29:40
that the most likely scenario is that he had the 13:29:45
major bleed or rebleed, if you will, sometime that 13:29:48
afternoon while he was in the hotel room sleeping. 13:29:53
Q. So you base that on the -- just the 13:29:58
description of his course through the day? Is 13:30:03
that fair to say? 13:30:06
A. Yes. 13:30:06
Q. Is any of that based on the wife's 13:30:06
deposition testimony? That is, that opinion about 13:30:10
whether or not he rebled, is that based at all on 13:30:14
the wife's testimony about what happened during 13:30:17
the day? 13:30:18
A. No. 13:30:19
Q. Is it based on, in part, on the 13:30:19

record from the Alaska Native Medical Center, the 13:30:26
emergency room visit record from the 19th? 13:30:29
A. Well, only to the extent that, as I 13:30:32
said earlier, his condition when he was seen at 13:30:36
the Alaska Native Regional Center was such that I 13:30:41
don't think he had had a major bleed at that time. 13:30:46
And that's why I don't think that he would have 13:30:50
had that terrible decline in clinical condition 13:30:53
unless he rebled. 13:30:58
Q. I am just trying to hit on all the 13:31:01
factors that went into your opinion about him 13:31:03
rebleeding. 13:31:06
And so, was it based on the CT scan in 13:31:07
the afternoon? 13:31:09
A. Well, to some extent the CT scan 13:31:11
showed, A, that he had a significant bleed; B, 13:31:15
that he had cerebral edema; C, that he had 13:31:19
ischemia. All of those things, in my opinion, are 13:31:24
more likely the result of a major bleed, and in my 13:31:28
opinion, the morning bleed, if he had one, was not 13:31:32
a major one. 13:31:35
Q. Now, I want to just explore the, 13:31:36
sort of, possibilities. And I understand it's 13:31:41
your opinion it's more likely than not that he had 13:31:43
a sentinel bleed the night before, sometime before 13:31:46

he presented to the ER, and then a rebleed that afternoon before he was taken to Providence; is that right? 13:31:49 13:31:54 13:31:57

A. That's correct. 13:31:57

Q. So now I want to understand possibilities. 13:31:58 13:31:59

I don't know, is it possible he could have had a significant bleed before he presented to the ER on the morning of April 19th? 13:32:01 13:32:02 13:32:05

A. I don't think so. 13:32:07

Q. Is that based on the note? 13:32:08

A. On how he presented. As I said, he didn't seem sick enough to be someone who had a major subarachnoid hemorrhage. 13:32:12 13:32:16 13:32:20

Q. Is that based on your own experience or the literature or what would that -- 13:32:24 13:32:26

A. On my own experience and the literature, yes. 13:32:29 13:32:30

Q. Let me ask you this. Would you agree that it's, at least in most of the cases involving patients with subarachnoid bleeds, that they usually rebleed after the first 24 hours? I mean, is that generally the case? 13:32:31 13:32:50 13:32:52 13:32:54 13:33:02

A. Well, I don't know what the statistics are exactly, but I know that patients 13:33:02 13:33:06

do rebleed in the first 24 hours. 13:33:10

Q. Sure, they do, and I am just wondering, do you know what the statistics are on that? 13:33:13 13:33:14 13:33:19

A. No. 13:33:19

Q. When you say the peak of incidence of vasospasm is between three and ten days post bleed, what is that based on? 13:33:19 13:33:24 13:33:26

A. The literature. 13:33:27

Q. What are some of the other factors -- I want to talk about patient outcomes and -- of patients who have aneurysms that resulted in subarachnoid bleeds. 13:33:28 13:33:52 13:33:55 13:33:57

What are some of the factors that -- we have talked about the Hunt-Hess scale, you know, how somebody is doing neurologically. Are there other factors that would play a role in how a patient is likely to do? 13:33:59 13:34:01 13:34:04 13:34:06 13:34:12

A. Yes. In the first place, there are other grading scales beside the Hunt-Hess. I think the Hunt-Hess is probably the most widely used, but there are other grading scales. I think that the statistics would say that the younger the patient, the better the outcome in general. 13:34:13 13:34:17 13:34:21 13:34:23 13:34:30 13:34:33

Q. And the younger meaning less than 40? 13:34:37 13:34:39

A. Sure. 13:34:40

Q. What else? 13:34:42

A. The magnitude of the bleed bears on the outcome. I mean, in other words, how much blood do you see when you go in surgically, or how much blood do you see on the CAT scan, is it a little bit or is it a lot? And that seems to have a prognostic significance. 13:34:42 13:34:50 13:34:53 13:34:56 13:34:59 13:35:03

Q. And just in terms of quantities, I don't know how neurosurgeons talk about it. Do they talk about it in terms of, you know, gee, it was like a pint of blood? I'm just curious. How do they measure it or have they -- 13:35:05 13:35:11 13:35:13 13:35:15 13:35:20

A. Well, you don't really quantitate it, other than to say, yeah, there was a lot of blood in the subarachnoid space or in the cistern is what we call it. But surgically, you -- in fact, one of the goals of surgery is to evacuate as much of the local clot around the area of the aneurysm as you can because that seems to lessen the subsequent incidence of vasospasm. 13:35:20 13:35:22 13:35:24 13:35:30 13:35:33 13:35:37 13:35:41 13:35:46

But on CAT scan, as far as quantifying it, you know, it's generally just more whether you see localized blood in one area, like in the 13:35:50 13:35:55 13:36:01

Sylvian fissure, or generalized or diffuse, such as in Mr. Allen's case. 13:36:04 13:36:08

Q. What is the significance if it's diffuse versus -- 13:36:10 13:36:11

A. Well, that just means that there is a greater quantity of blood in the subarachnoid space, that there was a major bleed and it's spread all over. 13:36:13 13:36:14 13:36:19 13:36:22

Q. Would you describe Mr. Allen's CT, is there -- is it just -- is it really just like there is a little bit of blood or there is a lot of blood? 13:36:24 13:36:28 13:36:30 13:36:32

A. There is a lot of blood. 13:36:32

Q. But in terms of characterizing the amount of blood that you might see on a CT, is that generally how neurosurgeons talk about it, there is a little blood, there is a lot of blood? 13:36:33 13:36:35 13:36:37 13:36:40

A. Well, or they might say it is diffuse rather than localized. That's probably a more common characterization, I would say. 13:36:42 13:36:43 13:36:46

Q. Are there any opinions, just generally, that you -- is there anything that you have seen, any documents, reports, anything you have seen, since you have drafted your report which would make you want to amend your report or 13:36:48 13:36:54 13:36:56 13:37:01 13:37:03

heavy objects or have a bump in your blood pressure to have a rebleed. The sentinel bleed is stopped by a very fragile little clot that -- normal physiologic mechanisms dissolve that clot. That is the normal thing that bodies do. They dissolve clots that form in your system.

Q. But certainly a patient is more likely to rebleed if they do something that could --

A. That certainly could increase your chances of rebleeding, but as statistics will show, rebleeding happens many times even in patients who are hospitalized in medical centers with aneurysm care of the latest variety before they get to surgery. It happens. There doesn't have to be a causative incident to make them rebleed.

Q. But certainly there could be a causative incident that does cause rebleeding?

A. Yes.

Q. For instance, a patient exerting himself, that could cause a rebleed; isn't that right?

A. It could be, yes.

Q. Before you go on, let me just make

sure that I followed up on that.

Had he been diagnosed with a subarachnoid hemorrhage in the morning when he presented at the Alaska Native Medical Center Emergency Department, his best Hunt-Hess grade at that point would have been a 1; isn't that right?

A. That's right.

Q. And, in fact, his worst Hunt-Hess grading system would have been a 1; isn't that right? Certainly at that time in the morning had he been diagnosed --

A. Well, at 8:00 in morning, yeah. But that is irrelevant. What I am saying is what is relevant is his worst grade prior to treating the aneurysm. Okay. I am saying that --

Q. And you define treatment, then, in that instance as surgery?

A. Surgery or interventional coiling.

Q. But not medical treatment?

A. That's right, because medical treatment can't stop bleeding.

Q. Can it -- does it change -- let me make sure I understand that.

Does it change at all? Medical treatment, that is, preoperative medical treatment

of the patient with a subarachnoid bleed, does that influence at all whether or not a patient rebleeds?

A. Well, only to the extent that, as you said earlier, you are keeping him in bed and trying to prevent him from vomiting so he doesn't raise his pressure. You prevent his blood pressure from jumping up. You can do things to try and minimize outside factors from causing a rebleed, but rebleeding is inevitable in a certain percentage of cases no matter what you do and where you are treated and how you are treated.

Q. Do you know what the percentage -- that percentage of cases is?

A. No. I can't quote the number.

Q. Do you know whether or not it's less than 50 percent?

A. Well, it probably is, but, I mean, that is -- it's hard to quote a number because it depends on what time frame you are talking about. Are you talking about in 24 hours or in 72 hours or ten days? I mean, some centers, you know, will sit on patients for ten days and then operate, you know, and their incidence of rebleeding is significant in that time. If you operate in the

first 72 hours, it's less.

But so, in quoting a number, it has to be tied in to how many days you are talking, over what period of time from the initial bleed.

Q. Do you have an opinion as to when Mr. Allen rebled on the date of the -- on the 19th?

A. Well, I can only say that it likely happened sometime between the time he laid down and went to sleep, which was, what, about -- was it 1:00 or 1:30? I mean, there are little discrepancies in the time frame, I think, from the different stories, but basically, I think it's somewhere around 1:00 or 1:30 in the afternoon that he went to sleep, and she went out for McDonald's or something and then came back. But sometime between there and, say, 3:00 or 4:00, I would say.

Q. Why do you say there -- the time, whatever time he laid down, to 3:00 or 4:00?

A. Well --

Q. I am focused on the 3:00 or 4:00 part.

A. Yeah. I am assuming that when he had the sonorous or stertorous breathing, that --